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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/642,701 | 08/19/2003 | Shin Sik Lee | P69075US0 | 2737 |

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JACOBSON HOLMAN PLLC
400 SEVENTH STREET N.W.
SUITE 600
WASHINGTON, DC 20004

| EXAMINER | |
|---|---|
| VO, HAI | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1771 | |

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/642,701 | LEE ET AL. | |
| | Examiner | Art Unit | |
| | Hai Vo | 1771 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *19 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

### *Claim Objections*

1. Claims 1-12 are objected to because of the following informalities: The phrase "characterized by" before "comprising" is preferably removed from the claims in accordance with US Patent Practice. The same token is applied to the phrase "characterized by the fact of". The phrase "characterized by the fact of" is preferably changed to --wherein--. Appropriate correction is required.
2. Claim 12 is considered non-compliant because it is identified with an improper status identifier. The proper status identifier is new, **not** added.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2000-006283 A. JP'283 discloses a joint structure comprising a skin layer 5, a core layer 3 and a polyurethane foam layer 7 formed between the core layer and skin layer (figure 2). The skin has a bent portion 17 being curved inwards within the polyurethane foam layer at a front end of the skin layer. The skin end portion 15a upwardly extending from an end of the bent portion and being pressed against the core layer 3. There is a foam staying space between the inner side surface of the core layer and the skin end portion of the skin layer. A jaw 13 is protruding from the inner side surface of the core layer and contacted with the partial end portion of the

skin layer. The core layer has a protrusion being curved with corresponding to the shape of the bend portion of the skin layer. JP'283 does not specifically disclose how the flow control walls for preventing a polyurethane foam form being overflowed directly between the inner side surface of the core layer and an end of the skin layer downwardly protruding form an inner upper surface of the core layer above the joint part of the core layer and the skin layer. However, since the joint structure of the JP'283 meets all the structural limitations as required by the claims. The joint structure comprises a skin layer, a core layer and a polyurethane foam layer formed between the core layer and skin layer. The skin has a bent portion being curved inwards within the polyurethane foam layer at a front end of the skin layer. The skin end portion 15a upwardly extending from an end of the bent portion and being pressed against the core layer 3. There is a foam staying space 17 between the inner side surface of the core layer and the skin end portion of the skin layer. A jaw 13 is protruding from the inner side surface of the core layer and contacted with the partial end portion of the skin layer. The core layer has a protrusion being curved with corresponding to the shape of the bend portion of the skin layer. It seems from the claim, if one meets the structure recited, the properties must be met or Applicant's claim is incomplete. Therefore, it is the examiner's position that the foam overflow as described by the claims would be substantially inherently prevented. Like material should perform like function. Accordingly, JP'283 anticipates the claimed subject matter.

5. Claims 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by KR 2002088479. KR'479 discloses a joint structure comprising a skin layer 3, a core layer 2 and a polyurethane foam layer 4 formed between the core layer and skin layer (see figure). The skin has a bent portion 3a being curved inwards within the polyurethane foam layer at a front end of the skin layer. There is a foam staying space between the inner side surface of the core layer and the skin end portion 3b of the skin layer 3. A jaw 2a is protruding from the inner side surface of the core layer and contacted with the partial end portion of the skin layer. A grove 2b is formed at the inner side surface of the core. The front portion of the skin layer longitudinally extends along the front surface of the core layer and is tightly contacted with the inner side surface of the core layer in which the groove is formed. The core layer has a protrusion being curved with corresponding to the shape of the bend portion 3a of the skin layer. KR'479 does not specifically disclose how the flow control walls for preventing a polyurethane foam form being overflowed directly between the inner side surface of the core layer and an end of the skin layer downwardly protruding form an inner upper surface of the core layer above the joint part of the core layer and the skin layer. However, since the joint structure of the KR'479 as modified by JP'283 meets all the structural limitations as required by the claims. The joint structure comprises a skin layer, a core layer and a polyurethane foam layer formed between the core layer and skin layer. The skin has a bent portion being curved inwards within the polyurethane foam layer at a front end of the skin layer. There is a foam staying space between the inner side surface of the core layer and the skin

end portion of the skin layer. A jaw 2a is protruding from the inner side surface of the core layer and contacted with the partial end portion of the skin layer. A grove 2b is formed at the inner side surface of the core. The front portion of the skin layer longitudinally extends along the front surface of the core layer and is tightly contacted with the inner side surface of the core layer in which the groove is formed. The core layer has a protrusion being curved with corresponding to the shape of the bend portion 3a of the skin layer. It seems from the claim, if one meets the structure recited, the properties must be met or Applicant's claim is incomplete. Therefore, it is the examiner's position that the foam overflow as described by the claims would be substantially inherently prevented. Like material should perform like function. Accordingly, KR' 479 anticipates the claimed subject matter.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 4, 6-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-006283, as applied to claims 3 above, further in view of EP 768 160. JP'283 does not disclose the joint structure wherein a pair of foam leakage preventing protrusion protruding from the inner side surface of the core layer. EP'160, however, discloses the joint structure wherein the core having a pair of

foam-leakage preventing protrusions to ensure the foaming material penetrates between the core and the skin, thereby improving the appearance of the instrument panel (column 7, lines 20-32, figure 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the core having two jaws to ensure the foaming material penetrates between the core and the skin, thereby improving the appearance of the instrument panel.

8. Claims 1-3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over KR 2002088479 further in view of JP 2000-006283. KR'479 discloses a joint structure comprising a skin layer 3, a core layer 2 and a polyurethane foam layer 4 formed between the core layer and skin layer (see figure). The skin has a bent portion 3a being curved inwards within the polyurethane foam layer at a front end of the skin layer. There is a foam staying space between the inner side surface of the core layer and the skin end portion 3b of the skin layer 3. A jaw 2a is protruding from the inner side surface of the core layer and contacted with the partial end portion of the skin layer. A grove 2b is formed at the inner side surface of the core. The front portion of the skin layer longitudinally extends along the front surface of the core layer and is tightly contacted with the inner side surface of the core layer in which the groove is formed. The core layer has a protrusion being curved with corresponding to the shape of the bend portion 3a of the skin layer. KR'479 does not specifically disclose the skin end portion upwardly extending from an end of the bent portion and being pressed against the core layer 2. JP'283 discloses a joint structure comprising a skin layer 5, a core layer 3 and a polyurethane foam layer 7

formed between the core layer and skin layer (figure 2). The skin has a bent portion 17 being curved inwards within the polyurethane foam layer at a front end of the skin layer. The skin end portion 15a upwardly extending from an end of the bent portion and being pressed against the core layer 3. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the skin end portion having a portion upwardly extending from an end of the bent portion before being pressed against the core layer motivated by the desire to prevent the foam leakage, thereby improving the appearance of the instrument panel ([0027], [0028] of JP'283).

KR'479 does not specifically disclose how the flow control walls for preventing a polyurethane foam form being overflowed directly between the inner side surface of the core layer and an end of the skin layer downwardly protruding form an inner upper surface of the core layer above the joint part of the core layer and the skin layer. However, since the joint structure of the KR'479 as modified by JP'283 meets all the structural limitations as required by the claims. The joint structure comprises a skin layer, a core layer and a polyurethane foam layer formed between the core layer and skin layer. The skin has a bent portion being curved inwards within the polyurethane foam layer at a front end of the skin layer. The skin end portion upwardly extending from an end of the bent portion and being pressed against the core layer. There is a foam staying space between the inner side surface of the core layer and the skin end portion of the skin layer. A jaw 2a is protruding from the inner side surface of the core layer and contacted with the partial end portion of the skin

layer. A grove 2b is formed at the inner side surface of the core. The front portion of the skin layer longitudinally extends along the front surface of the core layer and is tightly contacted with the inner side surface of the core layer in which the groove is formed. The core layer has a protrusion being curved with corresponding to the shape of the bend portion 3a of the skin layer. It seems from the claim, if one meets the structure recited, the properties must be met or Applicant's claim is incomplete. Therefore, it is the examiner's position that the foam overflow as described by the claims would be substantially inherently prevented. Like material should perform like function.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over KR 2002088479 A, as applied to claim 3 above, in view of EP 768 160 A. KR'479 does not specifically the join structure having a pair of jaws as the foam leakage preventing protrusions. EP'160, however, discloses the joint structure wherein the core having two jaws to ensure the foaming material penetrates between the core and the skin, thereby improving the appearance of the instrument panel (column 7, lines 20-32, figure 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the core having two jaws to ensure the foaming material penetrates between the core and the skin, thereby improving the appearance of the instrument panel.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,635,328 to Shimabara et al discloses an integral skin foam molded article having a core form with an accommodating recess.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HV

Hai Vo
Tech Center 1700